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## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

#### REPLY BRIEF FOR THE APPELLANTS

Ex parte Kai MUSTONEN, et al.

# UTILIZATION OF GEOGRAPHIC LOCATION INFORMATION IN IP ADDRESSING

Serial No. 10/717,600 Appeal No.: Group Art Unit: 2616

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### JUN, 1 0 2008 HE UNITED STATES PATENT AND TRADEMARK OFFICE THE BOARD OF PATENT APPEALS AND INTERFERENCES

In re the Appellant:

Kai MUSTONEN, et al.

Appeal No.:

Serial Number: 10/717,600

Group Art Unit: 2616

Filed: November 21, 2003

Examiner: Patel, Chandrahas B.

For: UTILIZATION OF GEOGRAPHIC LOCATION INFORMATION IN IP ADDRESSING

#### REPLY BRIEF

June 10, 2008

#### I. INTRODUCTION

This Reply Brief is filed in response to the Examiner's Answer dated May 14, 2008. In that Examiner's Answer, while no new grounds of rejection are made, comments and explanations are provided which are tantamount to new points of argument. This Reply Brief, therefore, is submitted to address these new points of argument, and to clarify why claims 22-46 of the pending application should be considered to be patentable over U.S. Patent No. 6,829,230 of Tiuri ("Tiuri"), U.S. Patent No. 6,249,820 of Dobbins et al. ("Dobbins"), U.S. Patent No. 6,952,729 of Bialk et al. ("Bialk"), and of U.S. Patent No. 6,147,986 of Orsic ("Orsic"), and, therefore, should be found by this Honorable Board of Patent Appeals and Interferences to be allowable.

This Reply Brief addresses a few of the deficiencies of the Examiner's Answer. Appellants' Appeal Brief, however, is maintained, and failure to repeat the arguments contained therein, or to address one or more argument set forth in the Examiner's

Answer should not be construed as waiver or an admission. The Appeal Brief speaks for itself, and this Reply Brief merely supplements the Appeal Brief to address certain aspects of the Examiner's Answer.

#### II. STATUS OF CLAIMS

Claims 22-46, all of the claims pending in the present application, are the subject of this appeal. Claim 44 was rejected under 35 U.S.C. §101 as allegedly being directed to being directed to non-statutory subject matter. Claims 22-25, 28-36, and 39-46 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Tiuri. Claims 26 and 37 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Tiuri in view of Dobbins and Bialk. Claims 27 and 38 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Tiuri in view of Orsic.

#### III. APPELLANT'S ARGUMENTS

Appellants respectfully submit that each of pending claims 22-46 recites subject matter which is neither disclosed nor suggested by Tiuri, Dobbins, Bialk and Orsic, whether they are considered individually or combined. Furthermore, Appellants respectfully submit that pending claim 44 recites patentable subject matter under 35 U.S.C. § 101.

As discussed in Appellants' Appeal Brief, Tiuri fails to disclose, or suggest, "wherein the geographical location information is coded in the suffix portion of the address," as recited in independent claim 22, and similarly recited in independent claims 33, and 43-46. The Examiner's answer appears to continue to assert that the

above-stated limitations would be obvious to one of ordinary skill in the art in light of Tiuri. Furthermore, the Examiner's answer appears to continue to solely rely on *In re Japiske* as its sole reasoning for its conclusion that claims 22-46 are obvious in light of Tiuri, and fails to address any of Appellants' arguments raised in Appellants' Appeal Brief. Appellants respectfully disagree with the assertion of the Examiner's answer for the following reasons.

As discussed in Appellants' Appeal Brief, the final Office Action correctly concluded that Tiuri fails to disclose, or suggest, "wherein the geographical location information is coded in the suffix portion of the address," as recited in independent claim 22, and similarly recited in independent claims 33, and 43-46. Furthermore, the final Office Action failed to identify any suggestion or motivation in Tiuri, or any other cited document, to modify the disclosure of Tiuri to teach the above-identified limitation of the independent claims. Instead, the final Office Action merely relied on the assertion that the above-identified limitation of the independent claims is a "rearranging of parts of an invention," and that "it has been held that rearranging parts of an invention involves only routine skilled [sic] in the art," citing *In re Japiske*.

As discussed in Appellants' Appeal Brief, the court's holding in *In re Japiske* was based on the reasoning that the rearrangement of parts would not modify the operation of the device because the placement of the starting switch did not modify how the hydraulic press operated. Thus, the court's holding was not so broad that any rearranging of parts of an invention would be obvious to one of ordinary skill in the art, but only the rearranging of parts of an invention where the operation of the device was not modified.

In contrast to *In re Japikse*, coding the geographical location information in the suffix portion of an internet protocol address as opposed to the prefix portion, in the present invention, <u>fundamentally modifies how embodiments of the present invention operate</u>. Specifically, as discussed in Appellants' Appeal Brief, coding the geographical location information in the suffix portion of an internet protocol address rather than the prefix portion modifies how embodiments of the present invention operate in at least two ways: (1) coding the geographical location information in the suffix portion assists in guarantying a truly unique internet protocol address; and (2) coding the geographical location information in the suffix portion provides for dynamically generating an IP address for a roaming mobile terminal without requiring an associated router to change its address.

The Examiner's answer fails to address any of Appellants' arguments as to why *In re Japikse* is not controlling in this case. Therefore, the Examiner's answer fails to articulate reasoning with some rational underpinning to support its legal conclusion of obviousness, as required by the Supreme Court. (see *KSR International Co. v. Teleflex Inc.*, 550 U.S. \_\_\_\_, 82 USPQ2d 1385 (2007); see also MPEP § 2141 III – Rationales to Support Rejections Under 35 U.S.C. § 103).

Therefore, Appellants submit that Tiuri fails to disclose, or suggest, all of the elements of independent claims 22, 33, and 43-46. Further, Dobbins, Bialk, and Orsic do not cure the deficiencies in Tiuri. Accordingly, Tiuri, Dobbins, Bialk and Orsic, whether considered individually or combined, fail to disclose or suggest all of the elements of the independent claims.

Claims 23-32 and 34-42 are dependent upon independent claims 22 and 33,

respectively. As discussed above, Tiuri, Dobbins, Bialk, and Orsic do not suggest all of the elements of independent claims 22 and 33. As such. claims 23-32 and 34-42 are patentable for at least the same reasons that independent claims 22 and 33 are patentable, and further, because they recite additional limitations.

Thus, the combination of Tiuri, Dobbins, Bialk and Orsic fails to disclose or suggest all of the elements of claims 22-46. Therefore, Appellants submit that the final Office Action has failed to establish a prima facie case of obviousness. Accordingly, Appellants respectfully request that the rejection be reversed and these claims allowed.

Regarding claim 44, as discussed in Appellants' Appeal Brief, claim 44 recites patentable subject matter under 35 U.S.C. § 101 because claim 44 recites functional descriptive material embodied on a computer-readable medium which produces a useful, concrete, and tangible result. The Examiner's answer appears to continue to assert that claim 44 fails to recite patentable subject mater under 35 U.S.C. § 101. Furthermore, the Examiner's answer fails to address any of Appellants' arguments raised in Appellants' Appeal Brief, specifically the Federal Circuit cases of *In re Warmerdam*, 33 F.3d 1354, 31 USPQ 2d 1754 (Fed. Cir. 1994), and *In re Lowry*, 33 F.3d 1579, 32 USPQD 23, 1031 (Fed. Cir. 1994), and the Patent Office's policies regarding computer-related subject matter in the MPEP. Appellants respectfully disagree with the assertion of the Examiner's answer for the following reasons.

The Examiner's answer stated that "a data structure ... on a computer-readable medium cannot produce a useful result." (see Examiner's answer at page 13). This statement directly contradicts the holding of *In re Lowry*. As discussed in Appellants' Appeal Brief, in *In re Lowry*, the Federal Circuit held that a claim directed to a data

structure stored in computer memory was patentable. (*see Lowry*, 32 USPQ 2d at 1033). Specifically, the Federal Circuit stated that a data structure is a specific electrical or magnetic structural element, and that such a data structure, in a memory, is a physical entity that provides increased efficiency in computer operation. (*see Id.*).

Furthermore, the MPEP does not contain a per-se rule against the patentability of a data structure embodied on a computer-readable medium. In contrast, as described in Appellant's Appeal Brief, MPEP § 2106.01 defines "functional descriptive material" as "data structures and computer programs which impart functionality when employed as a computer component." (see MPEP § 2106.01 – Computer-Related Nonstatutory Subject matter). MPEP § 2106.01 further states that when functional descriptive material is recorded on a computer-readable medium, it becomes structurally and functionally interrelated to the medium and is statutory. (see Id.)

The Examiner's answer further stated that "[t]he IP address cannot produce any result even though it is encoded on a computer-readable medium since it only defines the address of a device." (see Examiner's answer at page 13). Appellants respectfully disagree. As explained in Appellants' Appeal Brief, an internet protocol address, when embodied on a computer medium, provides a useful and tangible result. Namely, it acts as a locator for a first network device, so that a second network device can locate it and interact with it. Furthermore, it allows the network devices to communicate with each other on a computer network utilizing the Internet Protocol standard. Specifically, an internet protocol address communicates important information to a second network device about the first device, such as what network and host the first network device is associated with. Furthermore, the claimed internet protocol address provides enhanced

utility, by also communing geographic location information of the first network device to the second network device when embodied on a computer-readable medium, as recited in the claimed limitations "wherein the unique internet protocol address is generated from geographical location data of one of a node and a router connected to said node," and "wherein said geographical location information is coded in said suffix portion of said unique internet protocol address," of claim 44. Accordingly, claim 44 produces a useful, concrete, and tangible result.

Thus, claim 44 recites patentable subject matter under 35 U.S.C. § 101.

Accordingly, Appellants respectfully request that the rejection be reversed.

For all of the above noted reasons, it is strongly contended that certain clear differences exist between the present invention as claimed in claims 22-46 and the prior art relied upon by the Examiner, that the final Office Action has failed to establish a prima facie case of obviousness, and that claim 44 clearly recites patentable subject matter.

This final rejection being in error, therefore, it is respectfully requested that this honorable Board of Patent Appeals and Interferences reverse the Examiner's decision in this case and indicate the allowability of application claims 22-46.

In the event that this paper is not being timely filed, the applicant respectfully petitions for an appropriate extension of time. Any fees for such an extension together with any additional fees which may be due with respect to this paper may be charged to Counsel's Deposit Account 50-2222.

Respectfully submitted,

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